Appendix A
Guidance for Wetland Related Elements in Nonpoint Source (NPS) Proposals

Background

Prior to European settlement, the State of Michigan contained an estimated 11 million acres of wetlands, covering approximately 30 percent of the state's land mass. Approximately 6.5 million acres of those original wetlands remain. The primary reasons for wetland losses have been drainage for conversion to agriculture and urban development. Watersheds are significantly influenced by their wetlands. Wetlands provide many valuable water quality related functions including storing floodwaters, trapping sediments and nutrients, and protecting erodible stream banks and shorelines. Wetlands also contribute to groundwater recharge and provide valuable fish and wildlife habitat. Restoring, enhancing, or protecting wetlands can have positive water quality impacts. Therefore the NPS Program is encouraging the integration of wetland restoration and protection goals into local watershed management plans and supports the restoration and protection of wetlands as a means of addressing water quality concerns.

Planning Projects

Wetlands and Watershed Management Planning

All watershed plans should consider a wetlands component which results in the development of an inventory of existing wetlands, the identification of potential wetland restoration areas, and procedures and strategies to prioritize historically lost wetlands for restoration and existing wetlands for protection and preservation. Maps depicting current wetlands and areas with the potential for wetland restoration are available from the Department of Environmental Quality (DEQ).

The DEQ endorses the use of a Landscape Level Wetland Functional Assessment (LLWFA) as a means to prioritize areas for wetland restoration and protection. Methodologies to conduct a LLWFA of existing and historically lost wetlands were developed by the United States Fish and Wildlife Service. The DEQ has modified and refined the LLWFA process to reflect Michigan conditions. The LLWFA methodology is based on an inventory of existing wetlands, and a determination of the functions they are performing. This information is then used to prioritize them for protection and preservation. The LLWFA methodology will also allow the identification of historically lost wetlands, determine the functions they once provided, and to prioritize wetlands for restoration in order to obtain the most significant water quality improvements.

Elements for Inclusion in Watershed Management Plans

The following wetland related elements should be considered for watershed planning projects:

1) Compile wetland information on a watershed basis.
2) Assess local wetland protection capacity.
3) Identify wetland partners and roles.
4) Create an inventory of existing wetlands and potential wetland restoration sites within the watershed using GIS wetland related data layers (inventory/maps are now available from the DEQ).
5) Conduct a Landscape Level Wetland Functional Assessment (LLWFA), or similar protocol, of the watershed to produce an analysis of both historic and present day wetlands and their functions. The results are used to estimate the cumulative effect of historic wetland losses on the watershed and water quality. The results will assist the grantee in setting goals to replace wetland functions that have been lost since pre-settlement. The results will also be a critical source of information for developing procedures to prioritize existing wetlands for protection and preservation, and prioritizing

historically lost wetlands for restoration. **Note:** A map is included at the end of this guidance indicating watersheds where a LLWFA has been completed by the DEQ or is underway.

6) Define wetland goals and objectives for the watershed.
7) Develop a wetland restoration strategy. The strategy should identify the tools that will be used to accomplish the physical restoration as well as a system to prioritize which historically lost or degraded wetlands should be restored.
8) Develop a wetland protection/preservation strategy. The strategy should specify the methods or tools that will be used to increase the protection of existing wetlands and to prioritize the preservation of the highest quality wetlands.
9) Screen "priority" wetlands for further assessment and field evaluation.

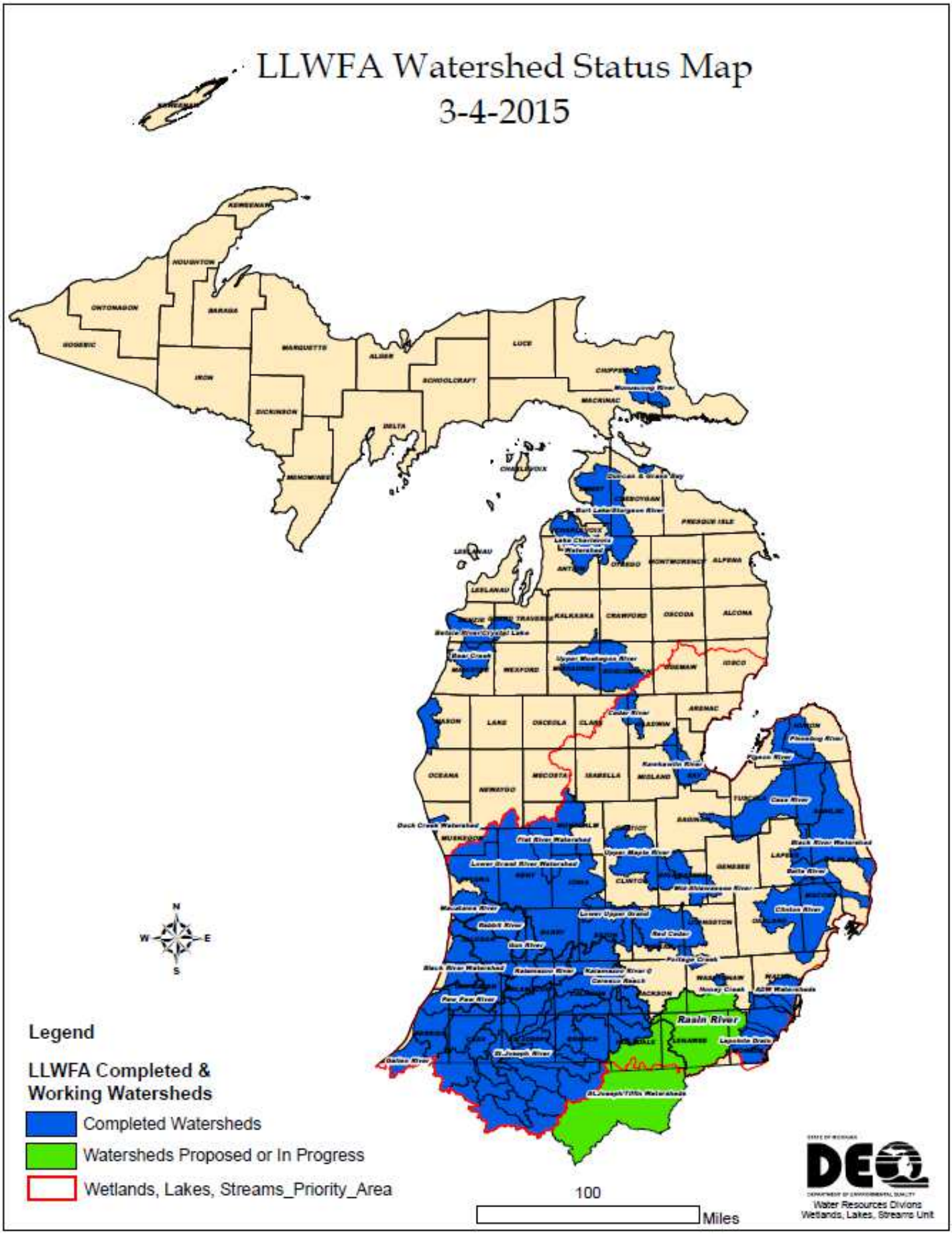
Projected Environmental Improvement

The short-term outcomes of this effort will be that grantees will gain an increased knowledge of where their wetlands are located, the specific functions that wetlands perform, and the overall importance of wetlands in the watershed. The expected transitional outcomes will be changes in practices that impact wetlands and local decisions that can protect or preserve wetlands. The anticipated long-term outcomes will be improved water quality as a result of existing wetlands that are protected and the restoration of wetlands that improve water storage and pollution removal capabilities.

Implementation Projects

Wetlands and Watershed Management Implementation

The DEQ endorses the use of a LLWFA as a means to prioritize areas for wetland restoration and protection. Therefore, proposals in watersheds with a completed LLWFA must use the tool to identify specific wetlands to address the water quality concerns and critical areas identified in the watershed plan. Proposals in areas without a LLWFA must include the rationale or methodology used to select specific wetlands for restoration or protection. The rationale or methodology must include the water quality concerns and critical areas identified in the watershed plan. Proposals to restore or protect wetlands with NPS funds or for match must identify specific locations. Those that include landowner letters of support will rank higher than those lacking such support. Proposals that will utilize NPS funds for technical and staff support and restore or protect wetlands using other sources of funding (Farm Bill for example) will not have to provide specific locations and best management practices at the proposal stage. Rather, such proposals must include a description of the protocol or methodology that will be used to target the pollutants/causes/sources and critical areas of the applicable watershed management plan.


LLWFA Watershed Status Map
3-4-2015
HOUGHTON
ONTONAGON
BARAGA
GOGEBIC
MARQUETTE
ALGER
LUCE
IRON
SCHOOLCRAFT
CHIPPEWA
DICKINSON
MACKINAC
DELTA
MENOMINEE
CHARLEVOIX
EMMET
PRESQUE ISLE
LEELANAU
OTSEGO
MONTMORENCY
ALPENA
KALKASKA
CRAWFORD
OSCODA
ALCONA
WEXFORD
OGEMAW
IOSCO
MASON
LAKE
OSCEOLA
CLARE
GLADWIN
ARENAC
OCEANA
NEWAYGO
MECOSTA
ISABELLA
MIDLAND
BAY
GENESEE
LAPEER
CLINTON
SHIAWASSEE
JOHNSTON
JACKSON
WASHTENAW
Raisin River
LENAWEE
Legend
LLWFA Completed & Working Watersheds
Completed Watersheds
Watersheds Proposed or In Progress
Wetlands, Lakes, Streams_Priority_Area
N
W
E
S
100
Miles
DEQ
Water Resources Division
Wetlands, Lakes, Streams Unit